

# OWNER'S GUIDE

**Model No. 110-400**

10 CENTS

## ROTARY MOWER

### WARRANTY

For one year from date of purchase, MTD Products, Inc., will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

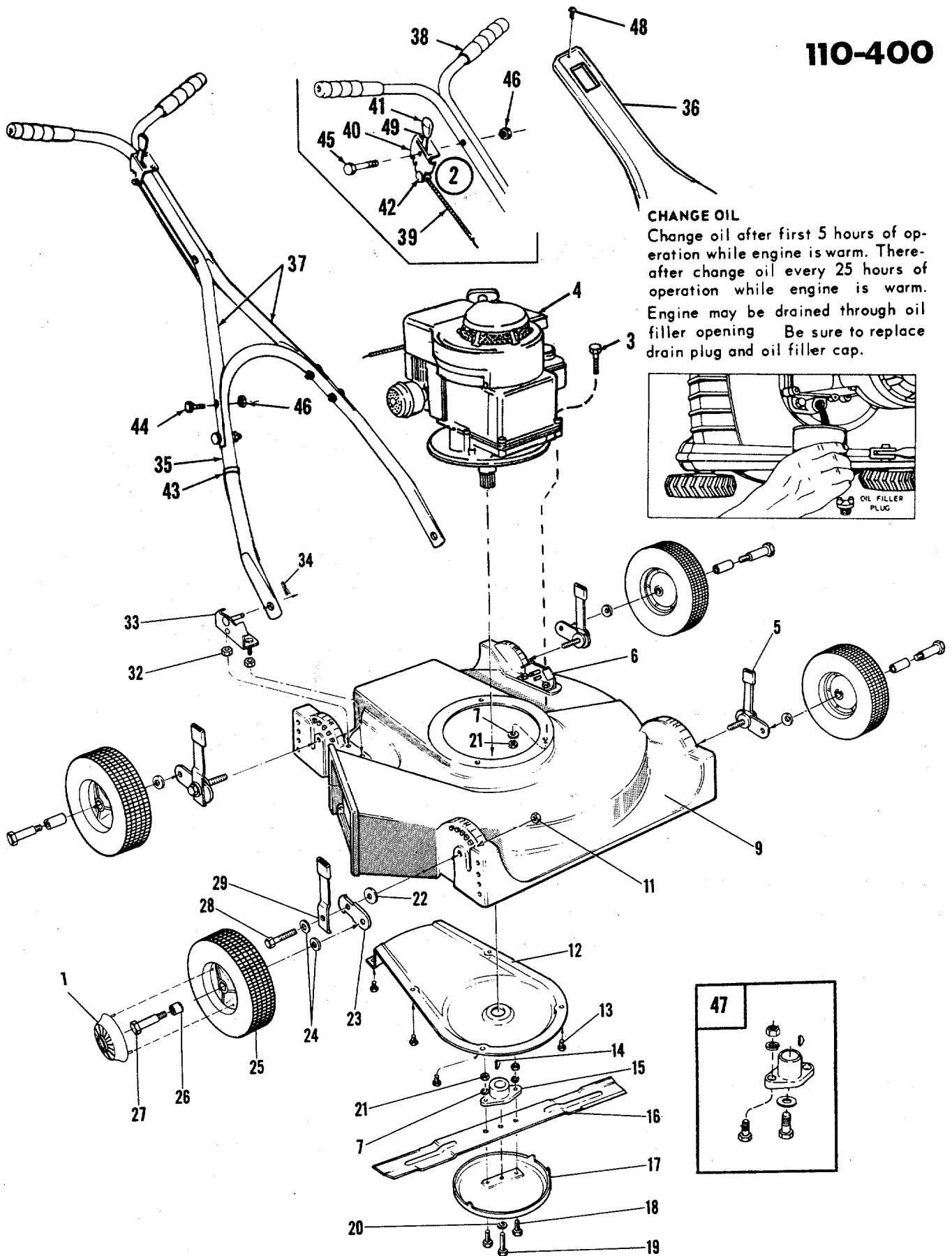
Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

### SAFETY RULES

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

1. Remove all sticks, stones, wire and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
2. Always disconnect spark plug cable during repairs or refueling operations.
3. Always start engine from side opposite discharge chute.
4. NEVER place hands or feet under mower or near discharge chute while engine is running.
5. Do not tilt mower at extreme angle while engine is running. Cut grass on hills and banks sideways, not up and down.
6. Always stop engine when not cutting grass.
7. Do not fill gas tank while engine is running. Do not spill gasoline on hot engine.
8. Keep children and pets away from area at all times during mowing operation. Never allow mower to discharge grass toward any person.
9. Do not attempt to start engine while mower is resting in high grass.
10. Check all nuts and bolts, particularly the blade bolts, for tightness. This is especially important during the initial operation period. Make this same check periodically thereafter.

NOTE: Should excessive vibration develop, check your blade and crankshaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged crankshaft.



**PARTS LIST FOR MOWER MODEL NO. 110-400**

Illus. No.	Part No.	DESCRIPTION
1	305-9871	Hub Cap
2	310-8511	Throttle Control
3	710-442	Hex Head Cap Screw - 5/16-18 x 1/1/2 long *
4	----	Engine
5	305-7520	Knob
6	310-8389	Handle Bracket Assembly - L.H.
7	736-119	Lockwasher - 5/16 Screw *
8	712-267	Hex Nut - 5/16-18 Thread
9	395-8790	Deck
11	712-214	Gripco Locknut 3/8-24
12	312-8220	Cover Plate
13	710-179	Hex Head Thread Cutting Screw - 1/4-20
14	714-365	Key - Hi-Pro #505*
15	748-100	Blade Adapter
16	312-8125	Blade - 21"
17	312-7919	Anti-Scalp Plate
18	710-117	Hex Head Cap Screw - Heat Treated - 5/16-24 x 1-1/4 long
19	710-113	Hex Head Cap Screw - Heat Treated - 3/8-24 x 1-5/8 long
20	736-169	Lockwasher - 3/8 Screw *
21	712-123	Hex Nut - 5/16-24 Thread *
22	736-133	Washer 3/8 I.D.
23	310-7492	Wheel Pivot Bar
24	736-105	Belleville Washer
25	501-9383	Wheel Assembly
26	741-114	Wheel Bearing
27	738-102	Axle Bolt
28	710-191	Hex Head Cap Screw - Heat Treated - 3/8-24 x 1-1/4 long
29	310-8243	Spring Lever Assembly
32	712-107	Hex Center Locknut - 1/4-20 Thread *
33	310-8388	Handle Bracket Assembly - R.H.
34	714-104	Hairpin - Cotter
35	310-8398	Handle - Lower
36	395-7857	Control Panel
37	310-9364	Handle - Upper (two required)
38	305-7072	Grip
39	732-141	Conduit & Wire
40	310-8506	Throttle Control Bracket
41	305-7470	Knob
42	901-7627	Ferrule
43	746-145	Cable <del>Strip</del> <b>CLIP</b>
44	710-106	Hex Head Cap Screw 1/4-20 x 1-1/4 long *
45	710-606	Hex Head Cap Screw 1/4-20 x 1-1/4 long *
46	712-107	Hex Nut 1/4-20 Thread *
47	901-7969	Blade Adapter Kit
48	710-473	Truss Head Machine Screw #10 - 24 Thread *
49	712-526	Speednut

\* For faster service obtain standard nuts, bolts, and washers locally. If these cannot be obtained locally, order by part number and size as shown on the parts list.

**NOTE!** This instruction manual covers various models, and all accessories shown do not necessarily apply to your model mower.

MTD PRODUCTS INC extends its warranty only on the mower. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines - Gasoline."



## ASSEMBLY

Your new mower is shipped completely assembled with the exception of the handle and throttle control assembly.

1. Remove lawn mower and all parts from carton. Make certain that all loose parts and literature are removed from carton before carton is discarded.
2. Extend throttle control assembly, which is attached to engine, to rear of mower and place on floor. CAUTION: Do not bend or kink control wire.
3. Assemble upper handle to lower handle using four each screws and lock nuts provided in parts bag.
4. Assemble complete handle assembly to mower so that throttle control mounting hole in upper handle will be on right side. Holes at bottom of lower handle are to be fitted over studs located in front of each rear wheel mounting position.
5. Position throttle control assembly on right hand side of upper handle so that holes in control assembly and handle are in line. Secure in place with screw and lock nut found in parts bag. Secure throttle wire to lower right handle tube with clips in parts bag.

## OPERATION

1. Service engine with gas and oil. See engine manual packed with lawn mower for complete instructions for the care and maintenance of engine. READ DIRECTIONS CAREFULLY.
2. When ready to start engine, place throttle control lever, on handle, in "START" position and start engine in accordance with instructions in engine manual. After engine starts, move throttle control lever, on handle, to desired engine speed. The engine is stopped by placing control lever on handle in the "STOP" position.
3. Be sure that lawn is clear of stones, sticks, wire or other objects which could damage lawn mower or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.

## ADJUSTMENTS

CAUTION: Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

**CUTTING HEIGHT** - Adjustment may be made by removing and moving wheel studs to desired position. Cutting heights will be raised as wheel studs are moved to a lower hole and lowered as wheel studs are moved to a higher hole in the deck. All wheel studs must be mounted in a relative position to the deck.

**THROTTLE** - If adjustment becomes necessary, the throttle control wire assembly can be reset as follows:

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine.
2. Move throttle control lever on handle to "FAST" position.
3. Move lever, to which control wire is fastened at engine, to full open position and retighten screw to secure throttle control wire assembly.

## LUBRICATION

**IMPORTANT:** Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

**WHEELS** - Wheel bearings are of lifetime Fortiflex. They require no lubrication.

**THROTTLE** - Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil (S.A.E. No. 10 or 20), for ease of operation.

**ENGINE** - Follow engine manual for lubrication instructions.

## MAINTENANCE

**CUTTING BLADE** - The blade may easily be removed for grinding or replacement as follows:

1. Remove bolt and lock washer holding blade and hub assembly to engine crankshaft.
2. Remove blade and hub assembly from engine crankshaft.
3. Remove two bolts, lock washers and nuts holding blade to blade hub.

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

Upon reassembly, make certain all parts are assembled properly and tightened securely.

**DECK** - The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its left side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose. CAUTION: Do not direct the stream of water at a hot engine as damage to the engine may result.

**STORAGE** - The following steps should be taken to prepare lawn mower for storage.

1. Clean and lubricate mower thoroughly as described in the preceding instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Place blocks under deck to raise tires clear of floor.
5. Store mower in a dry, clean area.

## USING YOUR ROTARY MOWER

For best results do not cut wet grass because it tends to stick to the underside of the mower thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce engine speed and walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.